

IN THE CLAIMS:

The following is a complete listing of claims in this application.

Claims 1-12 (canceled).

13. (previously presented) In a process for determining the form of a duplicate of a residual tooth area which is to be fitted with a dental restoration, in which duplicate sections to be fitted with the restoration and/or duplicate sections determining their design are removed from the duplicate and form data to be allocated to the forms of the sections is determined and stored in a computer, by means of which the form of the restoration is calculated taking into consideration the spatial allocation of the duplicate sections,

the improvement comprising individually referencing the duplicate sections as to spatial allocation to each other in a referencing stored in the computer, and which is independent of the duplicate.

14. (previously presented) Process according to claim 13, comprising the steps of:

- taking a casting of at least one of the residual tooth areas comprising part of the jaw;

- fabricating the duplicate by filling the casting with plaster;

mounting the duplicate on a base plate having references thereon;

- splitting the base plate with duplicate mounted thereon to obtain model sections which comprise the duplicate sections;

- measuring the duplicate sections for capturing form data and the references provided on the respective base plate sections;

- matching up data, which correspond to the references of the individual model sections, with the referencing data stored in a computer; and

- fabricating a dental restoration under consideration of the form data and the data gained by matching.

15. (previously presented) Process according to claim 13, wherein the duplicate is directly provided with references.

16. (previously presented) Process according to claim 15, wherein the references are produced when making the casting.

17. (previously presented) Process for determining the form of a duplicate of a residual tooth area which is to be fitted with a dental restoration, comprising the steps of:

taking a casting from at least one residual teeth area of a jaw to be fitted with a restoration,

fabricating a model from the casting as the duplicate by filling the casting with plaster,

attaching the duplicate to a base plate having references thereon,

splitting the base plate with the duplicate attached thereto apart to obtain duplicate sections,

measuring the duplicate sections taking into consideration the references from the base plate sections, onto which the duplicate sections are arranged, and

individually referencing the duplicate sections as to spatial allocation to each other in a referencing stored in a computer, and which is independent of the duplicate.

18. (previously presented) Process according to claim 17, wherein geometrical properties of the base plate and/or markings are used as the references.

19. (previously presented) Process according to claim 18, wherein the base plate contains points and/or lines as the markings.

20. (previously presented) Process according to claim 18, wherein the base plate contains geometrical properties delimitations in the form of edges or surface sections.

21. (previously presented) Process according to claim 17, additionally comprising surface grinding the duplicate on an underside and attaching the underside to a planar surface of the base plate following a tooth arc.

22. (previously presented) Process according to claim 21, wherein the duplicate is attached to the base plate such that the duplicate is spaced on all sides from an edge of the base plate.

23. (previously presented) Process according to claim 17, wherein the base plate exhibits along a longitudinal wall running along the duplicate, a texture.

24. (previously presented) Process according to claim 23, wherein the texture is a wave-shaped and/or zigzag geometry.

25. (previously presented) Process according to claim 24, wherein intersections or virtual interfaces of peripheries of the wave-shaped and/or zigzag geometry are used as the references.

26. (new) Process according to claim 16, wherein references are applied directly to the casting.

27. (new) Process according to claim 17, wherein the measuring is performed by placing the sections into a holding device, and determining geometry with a sensor.